WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

a gate electrode formed on a first conductive type semiconductor substrate via a gate oxide film;

a first low concentration drain region of a second conductive type, being formed adjacent to one end of said gate electrode;

a second low concentration drain region of the second conductive type, being formed in said first low concentration drain region so that said second low concentration drain region is very close to an outer boundary of said first low concentration drain region, and being higher in impurity concentration than at least impurity concentration of the first low concentration drain region; and

a high concentration source region of the second conductive type which is formed adjacent to another end of said gate electrode and a high concentration drain region of the second conductive type which is formed in said low concentration drain region having a predetermined distance from the one end of said gate electrode.

2. A semiconductor device according to Claim 1, wherein said first low concentration drain region and said second low concentration drain region are formed by utilizing two kinds of second conductive type impurities and each of said second

type conductive impurities has a diffusion coefficient different from each other.

3. A semiconductor device according to Claim 1, wherein said first low concentration drain region and said second low concentration drain region are formed by using a first impurity consisting of phosphorus ion and a second impurity consisting of arsenic ion, respectively.

4. A method for manufacturing a semiconductor device comprising a high concentration source region of the second conductive type formed adjacent to a gate electrode which is formed on a first conductive type semiconductor substrate via a gate oxide film, a low concentration drain region of the second conductive type formed adjacent to the gate electrode, and a high concentration drain region formed in the low concentration drain region,

wherein forming process of said low concentration drain region comprising:

a process ion-implanting at least two or more kinds of second conductive type impurities, each of said impurities having a diffusion coefficient different from each other, by using the same mask; and

a process diffusing said impurities.

5. A method for manufacturing a semiconductor device comprising:

a first process comprising steps of:

a first step forming a first photo resist film having a first opening at a drain forming region on a first conductive type semiconductor substrate,

a second step ion-implanting a first impurity of the second conductive type and a second impurity of the second conductive type with the first photo resist film being used as a mask, and

a third step forming a first low concentration drain region of the second conductive type and a second low concentration drain region of second type by diffusing said first impurity and said second impurity after the fore-mentioned ion-implanting step;

a second process forming an element separation film at a predetermined region by selectively oxidizing with an oxidization resist film formed on said substrate as a mask and forming a second gate oxide film at region except the element separation film and the first gate oxide film;

a third process forming a gate electrode so as to cover from said first gate oxide film to the second gate oxide film;

a fourth process forming a second photo resist film having a second opening on a source forming region on said substrate

and having a third opening on a region separated from another end of said gate electrode on said low concentration drain regions; and

a fifth process forming a high concentration source-drain regions of the second conductive type by ion-implanting a third impurity of the second conductive type on said substrate with said second photo resist film, said gate electrode, said element separation film, and said first gate oxide film as a mask.

6. A method for manufacturing a semiconductor device according to Claim 5,

wherein said process forming said first low concentration drain region and second low concentration drain region uses two kinds of second conductive type impurities and each of said second type impurities has a diffusion coefficient different from each other.

7. A method for manufacturing a semiconductor device according to Claim 5,

wherein the process forming said first low concentration drain region and second low concentration drain region is a process thermal-treating, at the same time, said first impurity consisting of phosphorus ion and said second impurity consisting of arsenic ion, and uses difference of diffusion coefficients of these impurities.